

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General site information. Please provide the following information about the site:

a) Name of facility/site : Former Raytheon Facility		Facility/site address:		
Location of facility/site : longitude: <u>42 21 53.42 N</u> latitude: <u>71 22 11.40 W</u>	Facility SIC code(s): 3812	Street: 430 Boston Post Road		
b) Name of facility/site owner : Raytheon Company, Luis Burkhardt		Town: Wayland		
Email address of owner: louis_j_burkhardt@raytheon.com		State: MA	Zip: 01778	County: Middlesex
Telephone no. of facility/site owner : (978) 436-8238		Owner is (check one): 1. Federal ____ 2. State/Tribal ____ 3. Private <input checked="" type="checkbox"/> 4. other, if so, describe:		
Fax no. of facility/site owner : (978) 436-8581				
Address of owner (if different from site):				
Street: 800 Technology Park Drive, MS 2-2124-01				
Town: Billerica	State: MA	Zip: 01821	County: Middlesex	
c) Legal name of operator : Environmental Resources Management RCM		Operator telephone no: (617) 646-7800		
		Operator fax no.: (617) 267-6447	Operator email: rachel.leary@erm.com	
Operator contact name and title: Rachel Leary, Project Manager				

Address of operator (if different from owner):		Street: 399 Boylston Street, 6th Floor	
Town: Boston	State: MA	Zip: 02116	County: Suffolk
d) Check "yes" or "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Yes___ No <input checked="" type="checkbox"/> , if "yes," number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No <input checked="" type="checkbox"/> , if "yes," date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes <input checked="" type="checkbox"/> No___ 4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes <input checked="" type="checkbox"/> No___			
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes <input checked="" type="checkbox"/> No___ If "yes," please list: 1. site identification # assigned by the state of NH or MA: RTN 3-22408 2. permit or license # assigned: Tier 1B W045278 3. state agency contact information: name, location, and telephone number: BWSC, Northeast Region, (617) 292-5500		f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y___ N <input checked="" type="checkbox"/> , if Y, number: 2. phase I or II construction storm water general permit? Y___ N <input checked="" type="checkbox"/> , if Y, number: 3. individual NPDES permit? Y___ N <input checked="" type="checkbox"/> , if Y, number: 4. any other water quality related permit? Y___ N <input checked="" type="checkbox"/> , if Y, number:	

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage: See Attachment A		
b) Provide the following information about each discharge:	1) Number of discharge points: 1	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow <u>50</u> Average flow <u>30</u> Is maximum flow a design value ? Y <input checked="" type="checkbox"/> N___ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. gallons per minute
3) Latitude and longitude of each discharge within 100 feet: pt.1 42 21 54.01 N 71 22 20.01 W pt.2: long.____ lat.____; pt.3: long.____ lat.____; pt.4: long.____ lat.____; pt.5: long.____ lat.____; pt.6: long.____ lat.____; pt.7: long.____ lat.____; pt.8: long.____ lat.____; etc.		

4) If hydrostatic testing, total volume of the discharge (gals): N/A	5) Is the discharge intermittent <input checked="" type="checkbox"/> or seasonal _____? Is discharge ongoing Yes _____ No <input checked="" type="checkbox"/> ?
c) Expected dates of discharge (mm/dd/yy): start <u>09/01/06</u> end <u>12/01/07</u>	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only <input checked="" type="checkbox"/>	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids	<input checked="" type="checkbox"/>		1	grab	160.2	5,000	-	-	-	-
2. Total Residual Chlorine	<input checked="" type="checkbox"/>		1	grab	330.1	50	-	-	-	-
3. Total Petroleum Hydrocarbons	<input checked="" type="checkbox"/>		1	grab	1664A	4,000	-	-	-	-
4. Cyanide	<input checked="" type="checkbox"/>		1	grab	335.2	5	-	-	-	-
5. Benzene	<input checked="" type="checkbox"/>		3	grab	624	50	-	-	-	-
6. Toluene	<input checked="" type="checkbox"/>		4	grab	624	50	-	-	-	-
7. Ethylbenzene	<input checked="" type="checkbox"/>		3	grab	624	50	-	-	-	-
8. (m,p,o) Xylenes	<input checked="" type="checkbox"/>		3	grab	624	100	-	-	-	-
9. Total BTEX ⁴	<input checked="" type="checkbox"/>		3	grab	624	-	-	-	-	-

⁴BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)	✓		14	grab	504	0.020	-	-	-	-
11. Methyl-tert-Butyl Ether (MtBE)	✓		3	grab	624	1,000	-	-	-	-
12. tert-Butyl Alcohol (TBA)	✓		2	grab	624	5,000	-	-	-	-
13. tert-Amyl Methyl Ether (TAME)	✓		3	grab	624	1,000	-	-	-	-
14. Naphthalene	✓		3	grab	8270M	0.20	-	-	-	-
15. Carbon Tetra-chloride	✓		12	grab	624	50	-	-	-	-
16. 1,4 Dichlorobenzene	✓		12	grab	624	250	-	-	-	-
17. 1,2 Dichlorobenzene	✓		12	grab	624	250	-	-	-	-
18. 1,3 Dichlorobenzene	✓		2	grab	624	250	-	-	-	-
19. 1,1 Dichloroethane	✓		12	grab	624	75	-	-	-	-
20. 1,2 Dichloroethane	✓		12	grab	624	75	-	-	-	-
21. 1,1 Dichloroethylene	✓		12	grab	624	50	-	-	-	-
22. cis-1,2 Dichloro-ethylene		✓	2	grab	624	50	270	-	270	-
23. Dichloromethane (Methylene Chloride)	✓		2	grab	624	250	-	-	-	-
24. Tetrachloroethylene		✓	2	grab	624	75	240	-	240	-

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		12	grab	624	100	-	-	-	-
26. 1,1,2 Trichloroethane	✓		12	grab	624	75	-	-	-	-
27. Trichloroethylene		✓	12	grab	624	50	4,300	-	4,300	-
28. Vinyl Chloride	✓		12	grab	624	100	-	-	-	-
29. Acetone	✓		3	grab	624	500	-	-	-	-
30. 1,4 Dioxane	✓		1	grab	624	100,000	-	-	-	-
31. Total Phenols	✓		1	grab	420.1	0.03	-	-	-	-
32. Pentachlorophenol	✓		1	grab	8270C	20	-	-	-	-
33. Total Phthalates ⁵ (Phthalate esthers)	✓		1	grab	8270C	vary	-	-	-	-
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	grab	8270C	10	-	-	-	-
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270M	-	-	-	-	-
a. Benzo(a) Anthracene	✓		1	grab	8270M	0.20	-	-	-	-
b. Benzo(a) Pyrene	✓		1	grab	8270M	0.20	-	-	-	-
c. Benzo(b)Fluoranthene	✓		1	grab	8270M	0.20	-	-	-	-
d. Benzo(k) Fluoranthene	✓		1	grab	8270M	0.20	-	-	-	-
e. Chrysene	✓		1	grab	8270M	0.20	-	-	-	-

⁵The sum of individual phthalate compounds.

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓		1	grab	8270M	0.20	-	-	-	-
g. Indeno(1,2,3-cd) Pyrene	✓		1	grab	8270M	0.20	-	-	-	-
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270M	-	-	-	-	-
h. Acenaphthene	✓		1	grab	8270M	0.20	-	-	-	-
i. Acenaphthylene	✓		1	grab	8270M	0.20	-	-	-	-
j. Anthracene	✓		1	grab	8270M	0.20	-	-	-	-
k. Benzo(ghi) Perylene	✓		1	grab	8270M	0.20	-	-	-	-
l. Fluoranthene	✓		1	grab	8270M	0.20	-	-	-	-
m. Fluorene	✓		1	grab	8270M	0.20	-	-	-	-
n. Naphthalene-	✓		1	grab	8270M	0.20	-	-	-	-
o. Phenanthrene	✓		1	grab	8270M	0.20	-	-	-	-
p. Pyrene	✓		1	grab	8270M	0.20	-	-	-	-
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	608	0.255	-	-	-	-
38. Antimony	✓		1	grab	6020	0.5	-	-	-	-
39. Arsenic		✓	1	grab	6020	0.5	2.3	-	2.3	-
40. Cadmium	✓		1	grab	6020	0.5	-	-	-	-
41. Chromium III	✓		1	grab	6020	0.5	-	-	-	-
42. Chromium VI	✓		1	grab	6020	20	-	-	-	-

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper		✓	1	grab	6020	0.5	0.6	-	0.6	-
44. Lead	✓		1	grab	6020	0.5	-	-	-	-
45. Mercury	✓		1	grab	6020	0.2	-	-	-	-
46. Nickel		✓	1	grab	6020	0.5	2.2	-	2.2	-
47. Selenium	✓		1	grab	6020	1	-	-	-	-
48. Silver	✓		1	grab	6020	0.5	-	-	-	-
49. Zinc	✓		1	grab	6020	5.0	-	-	-	-
50. Iron		✓	1	grab	6020	50	140	-	140	-
Other (describe):										

c) For discharges where **metals** are believed present, please fill out the following:

<p><i>Step 1:</i> Do any of the metals in the influent have a reasonable potential to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y ___ N <input checked="" type="checkbox"/></p>	<p>If yes, which metals?</p>
<p><i>Step 2:</i> For any metals which have reasonable potential to exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metals: _____ DF: _____</p>	<p>Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ___ N ___ If "Yes," list which metals:</p>

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system: See Attachment A						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank ✓	Air stripper	Oil/water separator	Equalization tanks	Bag filter ✓	GAC filter ✓
	Chlorination	Dechlorination	Other (please describe):			
c) Proposed average and maximum flow rates (gallons per minute) for the discharge and the design flow rate(s) (gallons per minute) of the treatment system: Average flow rate of discharge <u>30</u> Maximum flow rate of treatment system <u>50</u> Design flow rate of treatment system <u>50</u>						
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): None.						

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct <u> </u>	Within facility <u> </u>	Storm drain <u> </u> ✓	River/brook <u> </u>	Wetlands <u> </u> ✓	Other (describe):
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters: See Attachment A						

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
 1. For multiple discharges, number the discharges sequentially.
 2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
 The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water B,

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 10.65 cfs
 Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes No If yes, for which pollutant(s)?

Is there a TMDL? Yes No If yes, for which pollutant(s)?
 Metals

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes No
 Has any consultation with the federal services been completed? No or is consultation underway? No
 What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):
 a "no jeopardy" opinion? or written concurrence on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
 Yes No Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes No

7. Supplemental information. :

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

See attached Alpha Analytical Laboratories Report L0610884

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name: Former Raytheon Facility

Operator signature:



Title: Project Manager

Date:

9/7/06